

JUNIPER CREEK HEADWATERS PRESERVE MITIGATION SITE
Annual Monitoring Report, Year 5 of 5
February 10, 2012

PROJECT OVERVIEW

Impact: SR 73 (from SR 71 to north of SR 20)
USACE Permit No.: SAJ-2005-3585 IP-DEB, issued 5/5/06
Mitigation: Juniper Creek Headwaters Preserve, Bay County
Permittee/Consultant: FDOT
Responsible Party for Monitoring: Northwest Florida Water Management District (NFWFMD)
81 Water Management Dr.
Havana, FL 32333
Date of Inspection: January 20, 2012
Inspectors: Leigh Brooks, Robert Lide

Purpose of the Approved Project

The Juniper Creek Headwaters Preserve site compensates for 3.90 acres of wetland impacts associated with the road widening of SR 73 in Calhoun County, Florida.

Location and Directions

The mitigation site is located in the panhandle of Bay County in the community of Fountain at approximately 85°25'47"W and 30°29'18"N in Section 15, Township 1S, Range 12W ([Figures 1 and 2](#)). From US 231, head west at the post office on Silver Lake Road for 0.5 miles. Continue following the paved road as it turns north for 0.5 miles and intersects with the boundary road along the south perimeter of the Preserve.

Project Summary

The project goal is the acquisition, enhancement and perpetual preservation of 30 acres of wetlands and associated pine flatwoods buffers in the headwaters of Juniper Creek, a tributary of the Chipola River. The 30-acre parcel was acquired in 2006 by the Bay County Conservancy, Inc. (BCC), a land trust in northwest Florida, as an addition to their existing 10-acre Juniper Creek Headwater Preserve (Preserve) that was acquired for mitigation purposes in 2005. NFWFMD provided funding for acquisition and management by BCC through a legal agreement. A perpetual conservation easement on the 30 acres was granted to NFWFMD. A conservation easement on the adjoining 10 acres was granted to Bay County Audubon Society, Inc. in 2005 and re-recorded in 2006. Ecological management is to include erosion stabilization, control of nuisance/exotic species, and prescribed fire and/or other brush reduction methods for mesic/hydric pine flatwoods. The only use allowed is as a natural area; hunting and silvicultural activities are prohibited (USACE permit, Special Conditions 7, 8).

MITIGATION ACTIVITIES

Work Schedule (from Management Plan Attachment, Proposed Mitigation)

- Acquisition of 30 acres of the Anders parcel. **(Completed 3/06)**
- Recording of a conservation easement. **(Completed 8/06)**
- Removal of small trash pile on the northern boundary of the property. **(Completed 3/07)**
- Prescribed fire or other brush reduction methods on mesic and hydric pine flatwoods. **(Partially completed 2011)**
- Eradication and long-term management of Chinese tallow (*Sapium sebiferum*) and other nuisance/exotic plant species. **(Initial eradication complete; ongoing)**
- Restriction of vehicle access. **(Completed 3/07)**
- Stabilization of the dirt access road eroding into the unnamed intermittent stream. **(Road abandoned 3/07)**
- The road stream crossing excavated to natural grade, stabilized and revegetated with appropriate wetland species. **(Optional - Not scheduled)**
- Blocking ditch on western edge of parcel if offsite flooding would not result. **(Not scheduled).**

Work Schedule (from Management Plan Attachment, Work Schedule)

- Before expiration of permit, mitigation site will be acquired and enhanced, with guarantees of perpetual preservation in a natural state. Mitigation will include management for nuisance and exotic species. **(Completed and ongoing)**
- Annual inspections of site, if required by permitting authorities, by a qualified wetland scientist for duration of permit to ascertain attainment of success criteria. **(Completed)**
- Annual updates, if required by permitting authorities, for duration of permit. **(Completed)**

Description of management activities

In 2011, a fire break was plowed around the northern burn unit and a prescribed burn conducted by the Florida Forest Service (FFS). A hiking trail has been flagged on the southeastern portion of the Preserve.

MONITORING REQUIREMENTS (from USACE permit):

Monitoring Reports will be provided for a period of five years, or until success of criteria are achieved for two years.

Monitoring Reports shall provide an ecological assessment of the mitigation areas(s) based on analysis of the following data collected at each transect, or fixed-sample point located in wetlands, which are representative of all communities found within the mitigation area:

- (a) Identification and description of the target plant community (i.e., FNAI or FLUCCS coding) being assessed,
- (b) Dominant groundcover plant species and percent cover,
- (c) Dominant canopy plant species and percent cover (in forested systems),
- (d) Exotic/invasive plant species (see list of exotic plant species reference, above) and percent cover,

- (e) A functional assessment of each community, based on an approved assessment method (i.e., UMAM), to be conducted during the growing season,
- (f) A description of any unusual climatic conditions or natural phenomenon (i.e., burns, floods, drought, etc.),
- (g) Panoramic photos for each community, and
- (h) A determination if target communities have become established and/or if success criteria have been met.

Annual reports will be posted at www.NFWFMDwetlands.com for duration of monitoring.

SUMMARY OF MONITORING ACTIVITIES

Monitoring Observations

The current monitoring was carried out on January 20, 2012, and consisted of a meandering pedestrian survey throughout the site with photographs taken at a variety of points ([Figures 3 and 4](#)). Field sheets are attached documenting [site conditions](#) and [observed species](#). Based on previous annual surveys, 152 species of trees, shrubs, vines and herbaceous groundcover have been observed on site.

Preserve boundaries generally appeared intact and undisturbed. No perimeter fencing (except adjacent property fencing) and no boundary signage were visible. The south boundary on Silver Lake Road had some minor trash and trash had collected at all three culverts on the road. On Silver Lake Road, immediately west of the Preserve sign and abandoned road, several dead Chinese tallow trees ([Photo 1](#)) were noted. No non-native species were seen inside the Preserve.

At the east boundary, the adjoining property owner has created a wildlife food plot ([Photos 2 and 3](#)). Brush from clearing was piled up onto the Preserve.

A newly flagged and roughly cleared single-track trail running east/west was found in the southeastern quadrant between the drain and the flatwoods as shown in [Figures 3 and 4](#) and [Photo 4](#). The east end opened to the aforementioned neighboring property. It is not clear if this is an authorized trail. There was also a short flagged trail on the north end of the property, leading off the Preserve to the fire line. BCC indicated a loop trail had been developed; however, these observers could not distinguish it.

A prescribed fire had been conducted recently in the flatwoods north of the main drain ([Figures 3 and 4](#); [Photo 12](#)). Approximately 14 acres were burned. Results in the interior of the burn area looked good, with the understory opened up and grasses (wiregrass and bluestem) starting to re-sprout. There appeared to be some mortality of young slash pines which will help prevent a dense canopy from developing. In some areas titi was still green and clearly did not burn well ([Photos 5 and 7](#)), and in areas with denser hardwoods, fire failed to carry to the fire line. The burning off of vegetation exposed some small historic trash piles.

Of concern is the fire break plowed around the perimeter of the burn zone, a distance of 0.7 miles. The fire break is deeper than necessary (1-2 feet deep and holding water in places) and does not incorporate the existing road and ditch ([Photos 5-11](#)). A fire break of this magnitude could affect hydrology of the site by draining adjacent areas, conveying surface water off site during rain events instead of retaining it on site for recharging groundwater, and promoting

erosion of loose pushed up soil. Also of concern is an area of remnant wet prairie on the west side of the burn zone with state-endangered whitetop pitcher plants (*Sarracenia leucophylla*) as well as club moss and pipewort, which was bisected by the fire break ([Photo 10](#)). Some plants were plowed up and others smothered; some desirable large trees (*Persea* sp. and *Pinus* sp.) were knocked down or injured.

Titi continues to dominate in the unburned hydric pine flatwoods, covering ≥ 5 percent of the mitigation site. These areas would benefit from mechanical shrub reduction prior to burning. Unburned areas of flatwoods and drains had excessive buildup of pine needles and other fuels in the sub-canopy, shrub layer, and on the ground ([Photos 13-15](#)) from the density of pines remaining in the pine plantation. Fire is needed but care in burn strategy will be required to prevent the fire from getting too hot and killing desired vegetation, and from risking spot overs off the property.

Success Criteria

From ACOE permit (Special Condition 5)

- (a) Control or eradication of exotic/invasive plant species so that the mitigation site contains $\leq 1\%$ exotic, and $\leq 5\%$ native-invasive plant species including, but not limited to, the following: non-native pasture grasses, Chinese privet (*Ligustrum sinense*), Chinese tallow (*Sapium sebiferum*), Japanese climbing-fern (*Lygodium japonicum*), kudzu (*Pueraria montana*), primrose willow (*Ludwigia* sp.) and cogon grass (*Imperata cylindrica*), **Condition met for exotic species. Although not considered a native invasive on this site, titi has increased in dominance because of fire suppression over the years and has spread beyond the forested/shrub wetlands. Titi now covers over 40% of remaining portion of the mitigation site (approximately 9 of 21 flatwoods acres).**
- (b) Maintaining a dominant cover of native, suitable plant species in the wetland and upland buffer areas appropriate for the type of wetland community, **Condition partially met.**
- (c) Overall, maintaining ecological and hydrological condition so that the following post-development Unified Mitigation Assessment method (UMAM) scores are met, or exceeded, for each community type: **Condition partially met.**

From ACOE permit (Mitigation Plan Attachment)

- Acquisition, recording of a conservation easement deed restriction guaranteeing perpetual preservation in a natural state, and implementation of initial enhancement activities such as prescribed fire and nuisance/exotic species eradication. **Condition met.**
- Nuisance vegetation $\leq 5\%$ cover per acre for duration of permit. **Condition met.**
- Exotic vegetation $\leq 1\%$ cover per acre for duration of permit. **Condition met.**

CONCLUSION

Performance standards have not been fully met due to continued dominance of titi and fire not having been applied everywhere it is needed. The fire break will need to be remediated to restore natural hydrologic function. As part of this process, it would be a good time to consider means of restoring natural hydrology on the western side of the Preserve by blocking or filling in the pre-existing ditch and restoring the adjacent road footprint if it is determined that offsite flooding of adjacent property or housing will not occur.

It is recommended that mechanical shrub reduction be employed to deal with titi that has encroached into wet flatwoods and the wet prairie, as fire alone will not be sufficient to return to healthy natural communities. In the wet prairie, it is recommended work be conducted with hand tools and no heavy equipment to prevent further disturbance to the ground. Mechanical techniques could also be considered to reduce fuel loads prior to burning in unburned flatwoods. Thinning of plantation pines in drains and unburned flatwoods should also be considered to help manage fuel loads and may provide supplemental revenue to implement additional restoration activities.

Continued monitoring and control of invasive exotic species has been successful, as no problems were noticed this year. Implementation of prescribed fire was delayed for five years after acquisition, increasing fuel loads and titi encroachment. When prescribed fire was finally introduced, an abundance of caution may have prompted creation of excessive fire breaks detrimental to other conservation goals for the site. Improved coordination between BCC and NFWMD is needed to protect the sensitive attributes of the Preserve, as well as honor the Conservation Easement and mitigation goals.

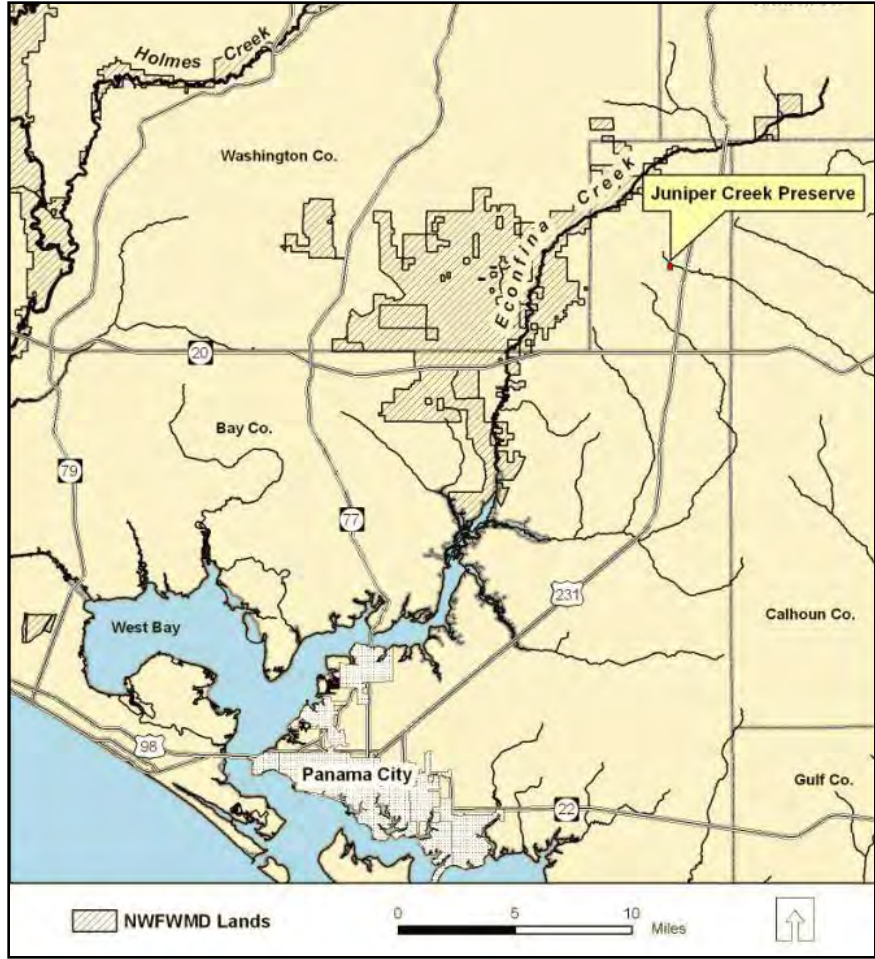


Figure 1. General location for the Juniper Creek mitigation site. [RTN](#)



Figure 2. Juniper Creek Headwaters Preserve. [RTN](#)

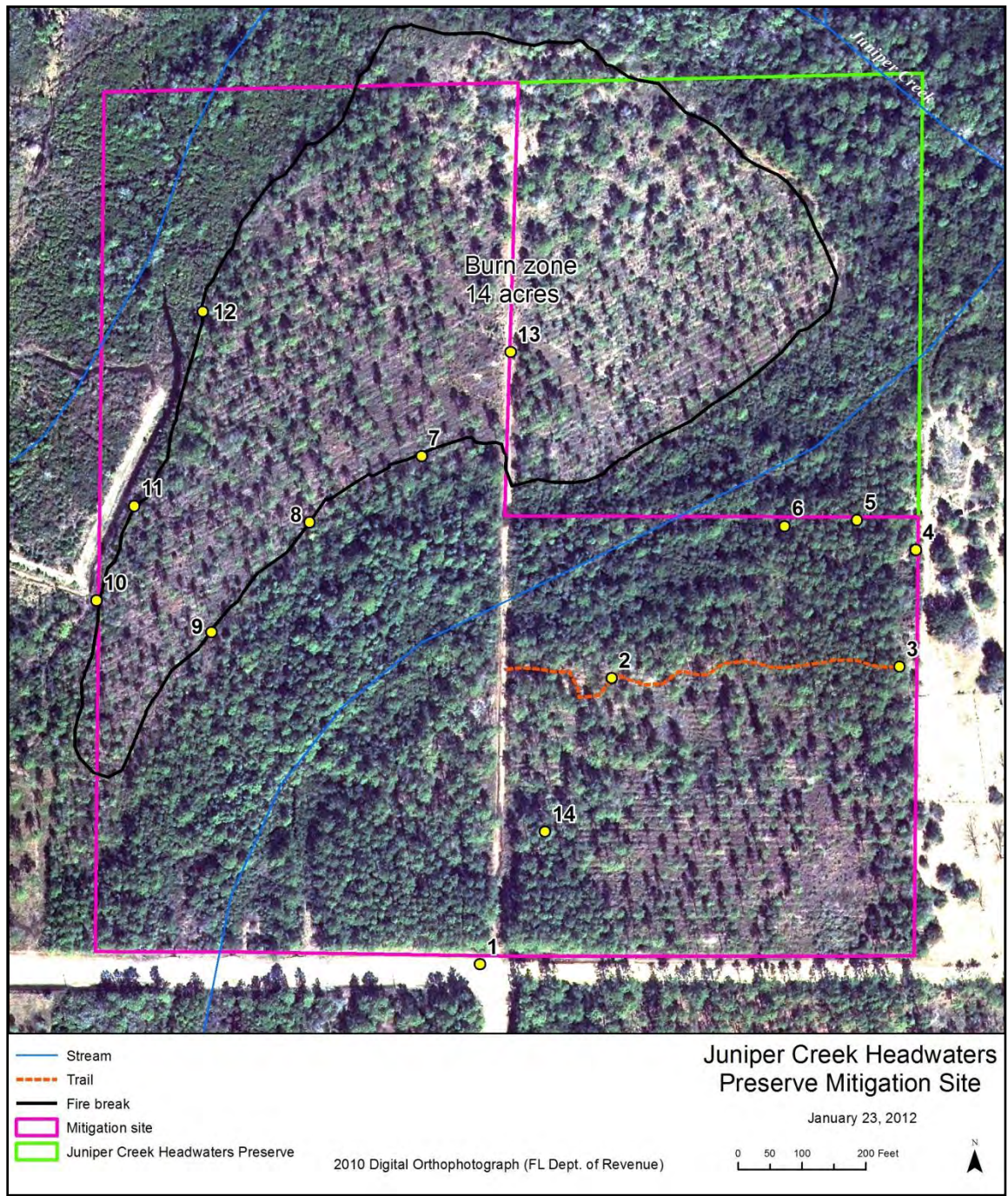


Figure 3. Aerial photograph of mitigation site with survey photo points indicated.

[RTN](#)

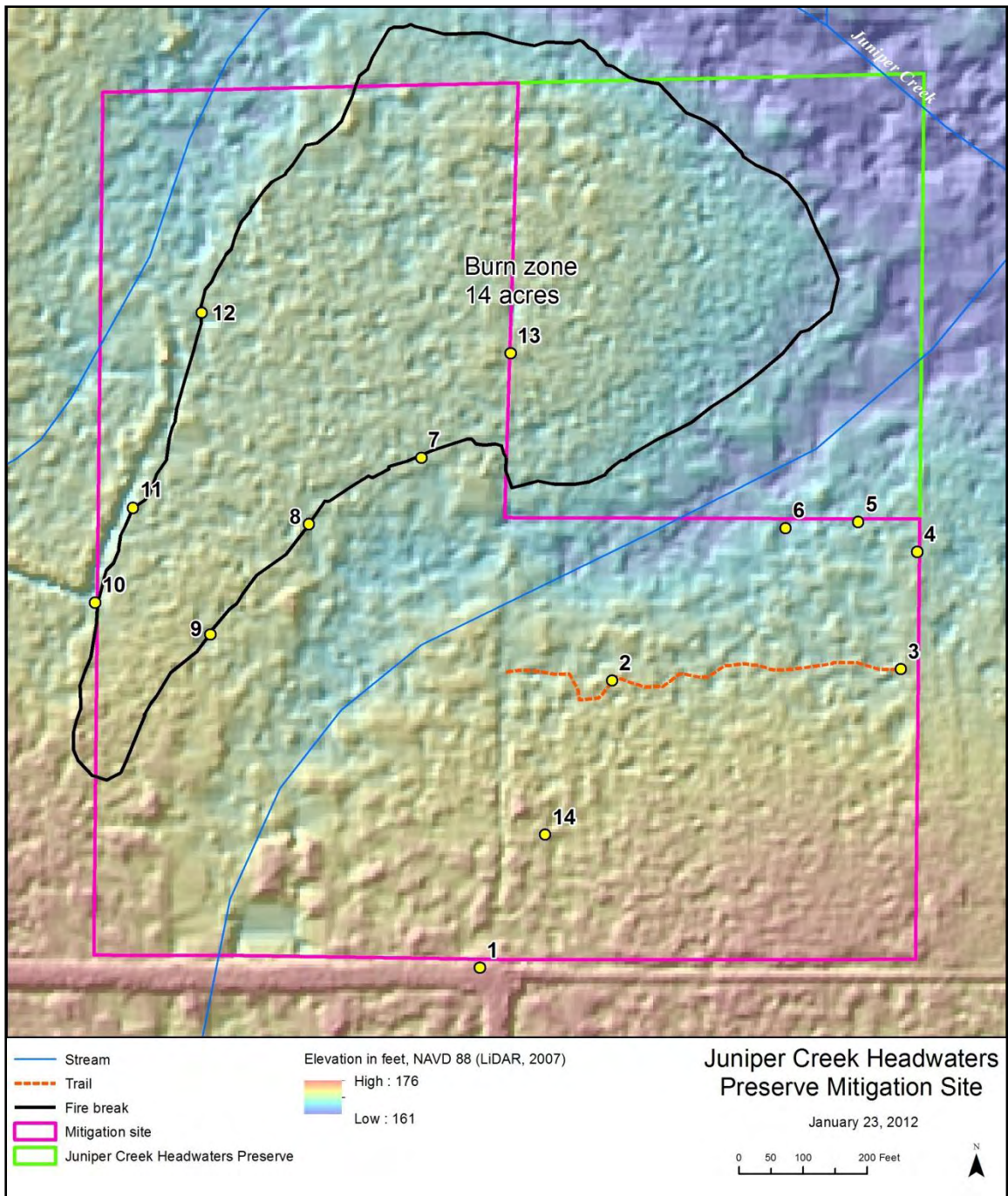


Figure 4. Topography of mitigation site with survey photo points indicated.

[RTN](#)



Photo 1. Treated Chinese tallow trees at Preserve entrance. Photo point 1, facing northwest. 1/20/2012. [RTN](#)



Photo 2. Flagged trail opens to neighboring property, hunt stand to south. Photo point 3, facing southeast. 1/20/2012. [RTN](#)



Photo 3. Hunt stand to north beyond oak tree. Property boundary unclear. Brush cleared and piled onto Preserve, new road/deer field planted in Bahia grass. Photo point 4, facing north. 1/20/2012. [RTN](#)



Photo 4. Flagged trail on south portion of Preserve. Photo point 2, facing east. 1/20/2012. [RTN](#)



Photo 5. Unburned shrubs on left, burned flatwoods on right, separated by plowed fire break. Photo point 7, facing west. 1/20/2012. [RTN](#)



Photo 6. Box turtle in wet spot of plowed fire break. Photo point 8, facing southwest. 1/20/2012.



Photo 7. Plowed fire break with mucky bottom. Unburned titi in background of burn zone. Photo point 9, facing southwest. 1/20/2012. [RTN](#)



Photo 8. Newly plowed fire break on left, existing road on right. Photo point 10, facing south. 1/20/2012. [RTN](#)



Photo 9. Newly plowed fire break on right parallels existing, lower ditch on left. Photo point 10, facing north. 1/20/2012. [RTN](#)



Photo 10. Plow fire break bisected a remnant wet prairie with whitetop pitcherplants (white arrows). Photo point 11, facing south. 1/20/2012. [RTN](#)



Photo 11. Plowed fire break. Photo point 12, facing north. 1/20/2012.

[RTN](#)



Photo 12. Burned flatwoods on north side of Preserve. Photo point 13, facing east. 1/20/2012. [RTN](#)



Photo 13. Heavy fuel accumulation in unburned flatwoods. Photo point 5, facing north. 1/20/2012. [RTN](#)



Photo 14. Heavy fuel accumulation in forested wetland drain. Photo point 6, facing northwest. 1/20/2012. [RTN](#)



Photo 15. Condition of south side of Preserve, in need of fire. Photo point 14, facing west. 1/20/2012. [RTN](#)

| | |
|--|--------------------------------------|
| Site Inspection Field Form | |
| Project: Juniper Creek Headwaters Preserve | Date: January 20, 2012 |
| Name(s) of Data Collectors: Leigh Brooks, Robert Lide | |
| Environmental Description: Hydric flatwoods Forested/shrub wetland | |
| Polygon: Juniper Creek Preserve Time: Noon | GPS Location: 30°29'18"N, 85°25'47"W |
| On at least a yearly basis, the site will be inspected as follows: | |
| <p>A: Perimeter for signs of trespassing, fencing and signage integrity and infestation by exotic or nuisance vegetation;</p> <p>No external signs of trespass. No fencing or signs except that of neighbors. Some trash on Silver Lake Road and in culverts. No exotic species except two dead Chinese tallow trees by entrance. Titi very heavy in wetlands and drains along Silver Lake Road.</p> | |
| <p>B: Internal Roads (Both public and maintenance) for signs of dumping or trespassing, erosion, bridges and road integrity, and exotic or nuisance species infestations;</p> <p>No internal signs of dumping, erosion from abandoned road, or exotic species. Possible trespass by neighbor to east. Titi very heavy in wetlands and encroaching mesic flatwoods.</p> | |
| <p>C: All construction areas for stabilization and re-vegetation, structure, operation, and integrity;</p> <p>NA.</p> | |
| <p>D: Representative polygons for each UMAM community for fuel load, exotic or nuisance species, planted material survival, groundcover, and shrub condition.</p> | |

| Vegetation Assessment Field Form | Qualitative Assessment |
|---|---|
| Project: Juniper Creek Headwaters Preserve | Date: January 20, 2012 |
| Name(s) of Data Collectors: Leigh Brooks, Robert Lide | Pedestrian Walkpath |
| Environmental Description: Hydric flatwoods Forested shrub wetland | Photo #'s |
| Polygon: Juniper Creek Time: Noon | GPS Location: 85°25'47"W and 30°29'18"N |
| <p>Nuisance Species: None by ACOE definitions, however titi is encroaching in areas. Fuel Load: Heavy in unburned areas. Mostly needlecast from (<i>Cyrilla racemiflora</i> and <i>Cliftonia monophylla</i>) dense pine trees in pine plantation.</p> | |
| <p>Wildlife Observations: Eastern box turtles, robins. Tracks from raccoon tracks in the fire break. Bird song.</p> <p>Water depth: 0 to 4 inches. Drains had some water but not flooded. Fire break held water in places. Ditch on west side had running water a few inches deep.</p> <p>Is the community observed along the walk path representative of the community being measured? Yes</p> <p>To what degree is the restoration in this area trending towards success? Mesic flatwoods in north part of site are trending toward success with recent burn. Mesic flatwoods on south side are not trending to success since they have not been burned and are overgrown with shrubs and titi. Wet flatwoods and wet prairie are not trending to success due to lack of fire and ditching from fire break.</p> <p>Potential problems and solutions: Fire break altering hydrology. Needs to be remediated. Heavy invasion of titi and heavy fuel loads can be remedied with combination of mechanical reduction and prescribed fire.</p> | |

| Scientific Name | Common Name | Habit |
|--|----------------------------|-------|
| <i>Aletris lutea</i> | yellow colicroot | H |
| <i>Andropogon gyrans</i> var. <i>gyrans</i> | Elliott's bluestem | H |
| <i>Andropogon ternarius</i> | splitbeard bluestem | H |
| <i>Andropogon virginicus</i> | broom sedge | H |
| <i>Andropogon virginicus</i> var. <i>glaucus</i> | blue stem | H |
| <i>Aristida stricta</i> var. <i>beyrichiana</i> | wiregrass | H |
| <i>Arundinaria gigantea</i> | switchcane | H |
| <i>Asclepias cinerea</i> | Carolina milkweed | H |
| <i>Asplenium platyneuron</i> | ebony spleenwort | H |
| <i>Baccharis halimifolia</i> | groundsel tree | S |
| <i>Balduina angustifolia</i> | coastalplain honeycombhead | H |
| <i>Callicarpa americana</i> | American beautyberry | S |
| <i>Carex glaucescens</i> | southern waxy sedge | H |
| <i>Carex jooarii</i> | caric sedge | H |
| <i>Carphephorus paniculatus</i> | hairy chaffhead | H |
| <i>Centella asiatica</i> | spadeleaf | H |
| <i>Cephalanthus occidentalis</i> | button bush | S |
| <i>Chamaecrista nictitans</i> | sensitive pea | H |
| <i>Chrysoma pauciflosculosa</i> | woody goldenrod | S |
| <i>Chrysopsis gossypina</i> | cottony goldenaster | H |
| <i>Clethra alnifolia</i> | coastal sweetpepperbush | S |
| <i>Cliftonia monophylla</i> | black ti-ti | S |
| <i>Cyperus</i> spp. | shortleaf spikesedge | H |
| <i>Cyrilla racemiflora</i> | Titi | S |
| <i>Dicanthelium scoparium</i> | panic grass | H |
| <i>Dichanthelium</i> sp. | witchgrass | H |
| <i>Diodia virginiana</i> | poor joe | H |
| <i>Drosera brevifolia</i> | dwarf sundew | H |
| <i>Drosera capillaris</i> | pink sundew | H |
| <i>Elephantopus</i> sp. | elephant's foot | H |
| <i>Eragrostis virginica</i> | coastal lovegrass | H |
| <i>Erigeron strigosus</i> | prairie fleabane | H |
| <i>Erigeron vernus</i> | early whitetop fleabane | H |
| <i>Eriocaulon decangulare</i> | common pipewort | H |
| <i>Eriogonum tomentosum</i> | dogtongue wild buckwheat | H |
| <i>Eryngium yuccifolium</i> | rattlesnakemaster | H |
| <i>Eupatorium capillifolium</i> | dog fennel | H |
| <i>Eupatorium mohrii</i> | Mohr's thoroughwort | H |
| <i>Euthamia caroliniana</i> | flat-topped goldenrod | H |
| <i>Fuirena pumila</i> | umbrella grass | H |
| <i>Gaylussacia dumosa</i> | dwarf huckleberry | H |
| <i>Gaylussacia frondosa</i> | blue huckleberry | H |
| <i>Gelsemium sempervirens</i> | Carolina jessamine | H |
| <i>Hibiscus aculeatus</i> | comfortroot | H |
| <i>Hieracium gronovii</i> | queen devil | H |
| <i>Hydrocotyle umbellata</i> | water pennywort | H |
| <i>Hypericum cistifolium</i> | hypericum | S |
| <i>Hypericum crux-andreae</i> | St. Peter's wort | S |
| <i>Hypericum fasciculatum</i> | peelbark St. John's-wort | S |
| <i>Hypericum galioides</i> | bedstraw St. John's-wort | S |
| <i>Hypericum gentianoides</i> | pineweed | H |
| <i>Hypericum hypericoides</i> | St. Andrew's cross | S |
| <i>Hypericum microsepalum</i> | flatwoods St. John's-wort | S |
| <i>Hypericum suffruticosum</i> | pineland St. John's-wort | S |
| <i>Ilex cassine</i> var. <i>myrtifolia</i> | myrtle dahoon | S |

| Scientific Name | Common Name | Habit |
|--|---------------------------|-------|
| <i>Ilex coriacea</i> | large gallberry | S |
| <i>Ilex glabra</i> | Gallberry | S |
| <i>Ilex opaca</i> | American holly | S |
| <i>Ilex vomitoria</i> | Yaupon | S |
| <i>Juncus debilis</i> | weak rush | H |
| <i>Juncus polycephalus</i> | manyheaded rush | H |
| <i>Juncus</i> sp. | rush | H |
| <i>Juncus tenuis</i> | poverty rush | H |
| <i>Kalmia hirsuta</i> | hairy laurel | S |
| <i>Lachnanthes caroliniana</i> | Carolina red root | H |
| <i>Lachnocaulon anceps</i> | whitedhead bog button | H |
| <i>Linum</i> sp. | yellow flax | H |
| <i>Liquidambar styraciflua</i> | sweetgum | H |
| <i>Lobelia amoena</i> | southern lobelia | H |
| <i>Lophiola aurea</i> | goldencrest | H |
| <i>Ludwigia alternifolia</i> | seed box | H |
| <i>Ludwigia leptocarpa</i> | anglestem primrose-willow | H |
| <i>Ludwigia pilosa</i> | hairy seed box | H |
| <i>Lycopodiella appressa</i> | southern bog clubmoss | H |
| <i>Lycopodiella alopecuroides</i> | foxtail clubmoss | H |
| <i>Lycopodiella cernua</i> | staghorn clubmoss | H |
| <i>Lycopodiella caroliniana</i> | slender clubmoss | H |
| <i>Lyonia lucida</i> | fetterbush lyonia | S |
| <i>Magnolia grandiflora</i> | southern magnolia | T |
| <i>Magnolia virginiana</i> | sweetbay | T |
| <i>Mimosa quadrivalvis</i> | sensitive briar | H |
| <i>Myrica cerifera</i> | wax myrtle | S |
| <i>Myrica heterophylla</i> | swamp bayberry | S |
| <i>Myrica inodorata</i> | odorless wax-myrtle | S |
| <i>Nyssa sylvatica</i> | swamp tupelo | T |
| <i>Nyssa sylvatica</i> var. <i>biflora</i> | black gum | T |
| <i>Osmunda cinnamomea</i> | cinnamon fern | H |
| <i>Panicum repens</i> * | torpedo grass | H |
| <i>Panicum</i> sp. | panicgrass | H |
| <i>Paspalum</i> sp. | crowngrass | H |
| <i>Paspalum urvillei</i> | vaseygrass | H |
| <i>Persea borbonia</i> | redbay | T |
| <i>Photinia pyrifolia</i> | red chokeberry | S |
| <i>Pinus elliotii</i> | slash pine | T |
| <i>Pinus palustris</i> | longleaf pine | T |
| <i>Pityopsis</i> sp. | silkgrass | H |
| <i>Plantanus occidentalis</i> | American sycamore | T |
| <i>Polygonella gracillis</i> | tall jointweed | H |
| <i>Polypremum procumbens</i> | rustweed | H |
| <i>Pseudognaphalium obtusifolium</i> | cudweed | H |
| <i>Pteridium aquilinum</i> | bracken fern | H |
| <i>Pterocaulon pycnostachyum</i> | Blackroot | H |
| <i>Quercus falcata</i> | southern red oak | T |
| <i>Quercus hemispherica</i> | laural oak | T |
| <i>Quercus minima</i> | dwarf live oak | S |
| <i>Quercus nigra</i> | water oak | T |
| <i>Quercus pumila</i> | running oak | S |
| <i>Rhexia alifanias</i> | Savannah meadowbeauty | H |
| <i>Rhexia mariana</i> | pale meadowbeauty | H |
| <i>Rhus copallina</i> | winged sumac | S |
| <i>Rhynchospora cephalantha</i> | bunched beaksedge | H |

| Scientific Name | Common Name | Habit |
|--|---------------------------|-------|
| <i>Rhynchospora chalarocephala</i> | loose-head beaksedge | H |
| <i>Rhynchospora chapmanii</i> | Chapman's beaksedge | H |
| <i>Rhynchospora ciliaris</i> | fringed beaksedge | H |
| <i>Rhynchospora fascicularis</i> | fascicled beaksedge | H |
| <i>Rhynchospora gracilienta</i> | slender beaksedge | H |
| <i>Rhynchospora plumosa</i> | plumed beaksedge | H |
| <i>Rubus cuneifolius</i> | sand blackberry | S |
| <i>Rudbeckia</i> sp. | shiny coneflower | H |
| <i>Sapium sebiferum</i> * | popcorn tree | T |
| <i>Sarracenia flava</i> | yellow pitcherplant | H |
| <i>Sarracenia leucophylla</i> ** | white-top pitcherplant | H |
| <i>Schizachyrium scoparium</i> var. <i>scoparium</i> | little bluestem | H |
| <i>Scirpus cyperinus</i> | wooly bullrush | H |
| <i>Serenoa repens</i> | saw palmetto | S |
| <i>Sesbania punicea</i> * | Rattlebox | S |
| <i>Sesbania vesicaria</i> | Bladderpod | S |
| <i>Seymeria pectinata</i> | black senna | H |
| <i>Smilax auriculata</i> | earleaf greenbrier | V |
| <i>Smilax glauca</i> | cat greenbrier | V |
| <i>Smilax laurifolia</i> | laurel greenbrier | V |
| <i>Smilax smallii</i> | lanceleaf greenbrier | V |
| <i>Smilax walteri</i> | coral greenbrier | V |
| <i>Solidago fistulosa</i> | pine-barren goldenrod | H |
| <i>Solidago odora</i> | anisescented goldenrod | H |
| <i>Sphagnum</i> spp. | sphagnum moss | H |
| <i>Symphyotrichum dumosum</i> | rice button aster | H |
| <i>Symphyotrichum walteri</i> | Walter's aster | H |
| <i>Syngonanthus flavidulus</i> | yellow hatpins | H |
| <i>Teucrium canadense</i> | wood sage | H |
| <i>Vaccinium arboreum</i> | farkleberry | S |
| <i>Vaccinium corymbosum</i> | highbush blueberry | S |
| <i>Vaccinium elliotii</i> | Elliott's blueberry | S |
| <i>Vaccinium myrsinites</i> | shiny blueberry | S |
| <i>Verbesina chapmanii</i> ** | Chapman's crownbeard | H |
| <i>Vernonia novaboracensis</i> | New York ironweed | H |
| <i>Viola lanceolata</i> | bog white violet | H |
| <i>Vitis rotundifolia</i> | muscadine | V |
| <i>Xyris brevifolia</i> | yelloweyed grass | H |
| <i>Xyris caroliniana</i> | Carolina yelloweyed grass | H |
| <i>Xyris fimbriata</i> | fringed yelloweyed grass | H |
| <i>Xyris flabelliformis</i> | Savannah yelloweyed grass | H |

Habit: herbaceous groundcover (H)
 shrub (S)
 tree (T)
 vine (V)